IN THE CLAIMS

Please amend the claims as follows. This claim set is to replace all prior versions.

1. (Currently Amended) A modified surface wherein the adhesion or attachment of cells, proteins and/or prionsparticles to the modified surface has been minimised or prevented by adjusting the Lifshitz-van der Waals (LW) surface free energy of an unmodified surface to be equal to or approximately equal to the Lifshitz-van der Waals (LW) surface free energy of the cells, proteins and/or prionsparticles in a solution and/or whole bloodan environment surrounding the surface,

wherein the surface is modified with a coating of modified diamond-like carbon (DLC), Ag--PTFE-surfactant or Ni--Cu--P—PTFE,

wherein the coated surface inhibits bacterial adhesion and colonisation, thrombus adhesion to the surface and foulant formation,

wherein the surface is one which comes into contact with cells, proteins and/or prions within a living human or animal body, and

wherein the adhesion or attachment of said cells, proteins and/or prions is minimised or prevented by modifying the surface free energy $\gamma^{LW}_{surface}$ of the surface in accordance with the Lifshitz-van der Waals (LW) surface free energy of the cells, proteins and/or prions so that:

$$\gamma^{LW}_{surface} \approx \gamma^{LW}_{S,Min}$$

wherein $\gamma^{LW}_{S,Min}$ is the minimum level of attachment to a surface S and is defined as follows:

$$\sqrt{\gamma^{LW}_{S,Min}} = (1/2)\left(\sqrt{\gamma^{LW}_{cellsand/orproteinsand/orprions}} + \sqrt{\gamma^{LW}_{solutionand/orwholeblood}}\right)$$

where $\gamma^{LW}_{\text{cells, proteins and/or prions}}$ is the LW surface free energy of the cells, proteins and/or prions, and $\gamma^{LW}_{\text{solution and/or whole blood}}$ is the LW surface free energy of the solution and/or of whole blood.

2-7. (Canceled).

8. (Withdrawn) A modified surface according to claim 1 wherein the surface is modified with a coating of diamond-like carbon (DLC) which is modified by incorporating elements selected from any of the following: halogens; Group IV elements; Group V elements; Group VI elements; and transition metals.

9. (Withdrawn) A modified surface according to claim 8 wherein the elements are present in an amount of 0-40% by weight.

10. (Withdrawn) A modified surface according to claim 8 wherein the elements incorporated into the diamond-like carbon by co-sputtering.

11. (Withdrawn)(Currently Amended) A modified surface according to claim 8 wherein the elements are incorporated into the diamond-like carbon (DLC) using reactive gases, silicon organic monomers, gaseous hydrocarbons, O_2, and/or N_2.

12. (Withdrawn)(Currently Amended) A modified surface according to claim 1[[7]] wherein the modified diamond-like carbon (DLC) is deposited using any of the following methods: microwave plasma deposition, plasma-enhanced vapour deposition, plasma-induced cold deposition, magnetron sputtering and ion beam-assisted deposition.

13. (Currently Amended) A modified surface according to claim 1[[7]] wherein the surfactant in the Ag--PTFE-surfactant is non-ionic, anionic or cationic.

14. (Currently Amended) A modified surface according to claim 1[[7]] wherein the ratio~~n~~ of Ag:PTFE:surfactant is about 80-60%:10-39%: 1 -10% by weight.

15. (Currently Amended) A modified surface according to claim 1[[7]] wherein the ratio of Ag:PTFE:surfactant is about 75%:22%:3% by weight.

16. (Currently Amended) A modified surface according to claim 1[[7]] wherein the surfactant in the Ag--PTFE-surfactant is selected from any of the following: $C_{20}H_{20}F_{23}N_2O_4I$, and polyoxyethylene nonylphenyl ether.

17. (Currently Amended) A modified surface according to claim 1[[7]] wherein the surfactant in the Ag-PTFE-surfactant is selected from any of the following: $C_{20}H_{20}F_{23}N_2O_4I$, and polyoxyethylene nonylphenyl ether, and wherein the polyoxyethylene nonylphenyl ether is selected from any of the following: 4-$(C_9H_{19})C_6H_4(OCH_2CH_2)_nOH$, n~12, Hydrophile Lipophile Balance (HLB)=12; 4-$(C_9H_{19})C_6H_4(OCH_2CH_2)_nOH$, n~40, HLB=17.8; 4-$(C_9H_{19})C_6H_4(OCH_2CH_2)_nOH$, n~100, HLB=19; and $(C_9H_{19})C_6H_4(OCH_2CH_2)_nOH$, n~150, HLB=19.

18. (Currently Amended) A modified surface according to claim 1[[7]] wherein the Ag--PTFE-surfactant coating is obtained using an electroless plating technique.

19. (Currently Amended) A modified surface according to claim 1[[7]] wherein the Ag--PTFE-surfactant coating is obtained using an electroplating technique.

20. (Currently Amended) A modified surface according to claim 1[[7]] wherein the Ni--Cu--P--PTFE coating is obtained using an electroless plating technique.

21. (Withdrawn) (Currently Amended) A modified surface according to claim 1[[7]] wherein the Ni--Cu--P--PTFE coating is obtained using an electroplating technique.

22. (Withdrawn) (Currently Amended) A modified surface according to claim 1[[7]] wherein the ratio of Ni:Cu:P:PTFE is about 97-40%:1-20%:1-20%:1-20% by weight.

23. (Withdrawn) (Currently Amended) A modified surface according to claim 1[[7]] wherein the Ni:Cu:P:PTFE ratio may be 80%:11%:4%:5% by weight.

24. (Canceled)

25. (Original) A modified surface according to claim 1 wherein the modified surface is part of a medical device.

26. (Original) A modified surface according to claim 25 wherein the medical device is selected from any of the following: endoscopes and accessories; ophthalmic equipment; dental equipment; surgical instruments; heart valves; stents; catheters; joint prostheses; intraocular lenses, dental implants, electrodes and cable equipment.

27. (Previously Presented) A modified surface according to claim 1 wherein the modified surface inhibits the following bacteria: Staphylococcus epidermidis, Staphylococcus aureus, Psuedomonas aeruginosa, Escherichia coli, Candida albicans or any other microorganisms which could cause device-related infections.

28. (Cancelled.)

29. (Original) A device comprising a modified surface according to claim 1.

30. – 32. (Canceled)